

Notice of Allowability

Application No.

09/672,287

Examiner

Dah-Wei D Yuan

Applicant(s)

MATSUBARA ET AL.

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/20/04.
2. ☒ The allowed claim(s) is/are 9-11,13-15,17 and 18.
3. ☒ The drawings filed on 28 September 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

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**NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY
ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, AND METHOD OF
PREPARING NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM
SECONDARY BATTERY**

Examiner: Yuan

S.N. 09/672,287

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June 24, 2004

Detailed Action

1. The Applicant's amendment filed on May 20, 2004 was received. Claims 1-4,6-8,16,19-20 were cancelled. Claim 9 was amended.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on February 2, 2004.

Claim Rejections

3. The claim rejections under 35 U.S.C. 102(b) as anticipated by Igawa et al. on claims 1-4,6-8,16,19,20 are withdrawn because all the claims have been canceled.

Reasons for Allowance

4. Claims 9-11,13-15,17,18 are allowed. The invention of independent claim 9 recites a method of preparing a negative active material for a rechargeable lithium batter comprising the steps of adding a fatty acid metal salt to a carbonaceous material to produce an agglomerated precursor, wherein the fatty acid metal salt includes one or more metals selected from the group consisting of Sn, Ag, Fe, Pd, Al, Si, In, Ni, Co, Zn and Cd; and heat-treating the precursor to a particle agglomerated product having an amorphous metal compound. The closest prior art of

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record, Goda et al., only teaches a method whereby an amorphous tin-based composite oxide, a flake graphite, polyvinylidene fluoride, carboxymethyl cellulose and lithium acetate are kneaded in water to prepare a slurry as the active negative electrode material. Igawa et al. teach the negative electrode is produced by coating the surface of a carbon-based material with an amorphous oxide containing one or more elements selected from Li, Ge, Sn, Pb, Sb, Bi, B, Al, Si and In. Neither reference teaches a method to form an agglomerated precursor of a fatty acid metal salt and a carbonaceous material before the heat treatment in the preparation of a negative active material for a rechargeable lithium battery.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan
June 24, 2004

A handwritten signature in cursive script, appearing to read "Dahwei Y", with a long horizontal flourish extending to the right.